



PROJECT PROCESS: Construction & Maintenance



Bhaskaran Subramanian January 16, 2010





Case Study- I (before)







Case Study- I (during construction)

Sand placement



Rock placement





Contractor at work





Case Study- I (after construction)



Goose Fencing

Planting







Case Study- I (one year after completion)









Case Study- II (before)







Case Study- II (during construction)







Case Study- II (after construction)











Case Study- II (one year after completion)











Assessment Study

- Factors analyzed:
 - Marsh erosion
 - Structure condition
 - Non-planted vegetation

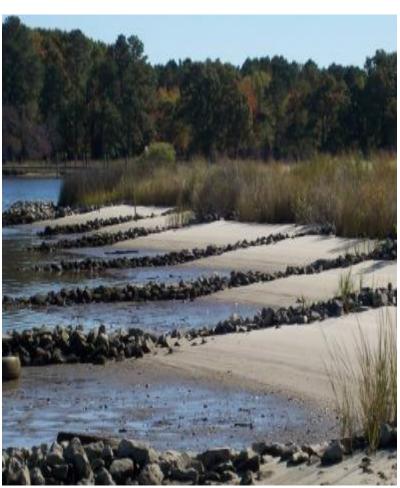




Marsh Erosion



No erosion



> 50% erosion





Structure Displacement



Excellent



Displacement





Non-Planted Vegetation







Results

 Out of 177 projects, 131 of them were good or better.

Maintenance- Crucial for the success of a project.



Probable Causes of Decreased Performance

- Poor engineering and/ construction.
- Poor execution of Plans.
- "Incorrect" planting.
- Choice of marsh grasses.
- Boat wake.
- Lack of maintenance.







Maintonanco Protocol

- Control the nonplanted species.
 - Use of moderate quantities of weed killers.
 - Choice of the weed killer: broadspectrum vs. specific.







- Keep the sky clear for the plants.
 - Uprooting young shrubs.
 - Pruning.
- Clearing junk!!!
 - Debris or dead tree trunks.







Other Recommendations

- Restore any damage in the stone structures.
- Most of the maintenance methods are simple and yield great results.
- Survival of the marsh grasses is crucial for the success of the living shorelines projects.
- Marsh grasses need constant attention and care to protect homeowners' property from erosion.





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Maintenance- Crucial for the success of a project.

Process- arduous; but "doable".





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